

Notice of Allowability

Application No.

10/712,713

Examiner

Jennifer E. Graser

Applicant(s)

CHOI, GIL H.

Art Unit

1645

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 9/27/04.
2. ☒ The allowed claim(s) is/are 22-30 and 40.
3. ☐ The drawings filed on _____ are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|---|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____ |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____ |

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EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mark Hyman on December 7, 2004.

Claims 22-30 are directed to an allowable product. Pursuant to the procedures set forth in the Official Gazette notice dated March 26, 1996 (1184 O.G. 86), claim 40, directed to the process of making or using the patentable product, previously withdrawn from consideration as a result of a restriction requirement, has been rejoined. Claim 40 was rejoined and fully examined for patentability under 37 CFR 1.104.

Claims 22-30 and 40 are allowed.

2. The application has been amended as follows:

In claim 40, line 3, insert the phrase "under stringent hybridization conditions" before the semicolon.

3. The following is an examiner's statement of reasons for allowance:

The phrase "stringent hybridization conditions" is defined by Applicant on page 31, lines 8-12, of the specification, e.g., "By "stringent hybridization conditions" is intended overnight incubation at 42°C in a solution comprising: 50% formamide, 5x SSC (750 mM NaCl, 75 mM trisodium citrate), 50 mM sodium phosphate (pH 7.6), 5x Derthardt's solution, 10% dextran sulfate, and 20 ug/ml denatured, sheared salmon sperm DNA, followed by washing the filters in 0.1x SSC at about 65°C".

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The prior art references do not teach or suggest an isolated nucleic acid molecule comprising a polynucleotide sequence selected from the group consisting of:

(a) a polynucleotide sequence encoding SEQ ID NO:2; and (b) SEQ ID NO:1".

Lowe (Submitted. Nov. 11, 1997. Genbank Accession #: AF034076) teach a polynucleotide sequence which only has a complete overall match of 75.5% to Applicant's SEQ ID NO:1. Nicola et al (Genbank Accession #: E35613, August 24, 1999) teach a sequence with over 13 mismatches, many which are not conservative substitutions. Kunsch et al teach a polynucleotide sequence which contains an extra 1106 nucleotides and does not teach the location of ORFs. Wallis et al.(Genbank Accession #: AAV99650, corresponding to patent EP889123) teaches a polynucleotide sequence which has 13 mismatches and 33 more nucleotides than Applicant's SEQ ID NO:2. The closest prior art of record, by Lowe (DNA Seq. 10(1). 19-23, 1999, corresponding to Genbank Accession #: AF034076), has an overall match of 98.8% to Applicant's SEQ ID NO:1, but contains 7 mismatches and encodes a protein which differs from Applicant's SEQ ID NO:2, e.g., it contains several non-conservative mismatches. None of the nucleotide sequences disclosed by the prior art references encode a protein comprising the amino acid sequence set forth in Applicant's SEQ ID NO:2. Accordingly, the claims are allowed.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

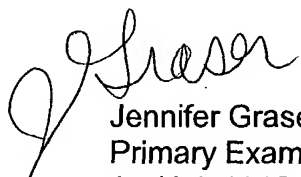
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4. Correspondence regarding this application should be directed to Group Art Unit 1645. Papers related to this application may be submitted to Group 1600 by facsimile transmission. Papers should be faxed to Group 1600 via the PTO Fax Center located in Remsen. The faxing of such papers must conform with the notice published in the Official Gazette, 1096 OG 30 (November 15, 1989). The Group 1645 Fax number is (703) 872-9306 which is able to receive transmissions 24 hours/day, 7 days/week.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jennifer E. Graser whose telephone number is (571) 272-0858. The examiner can normally be reached on Monday-Friday from 7:00 AM-4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynette Smith, can be reached on (571) 272-0864.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (571) 272-0500.

 12/7/04
Jennifer Graser
Primary Examiner
Art Unit 1645